LISTING OF THE CLAIMS

1. (Previously Presented) A material for forming copper undercoat films comprising a compound represented by the general formula

$$(R_1R_2)P\text{-}(R)n\text{-}Si\ (X_1X_2X_3)$$

wherein at least one of X_1, X_2 and X_3 is a hydrolytic group, R_1 and R_2 are alkyl groups, R denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6, wherein the material prevents copper diffusion.

2. (Previously Presented) A material for forming copper undercoat films comprising a compound represented by the general formula:

$$(R_1R_2)P\text{-}(R)n\text{-}Si\ (X_1X_2X_3)$$

wherein at least one of X_1, X_2 and X_3 is selected from a group comprising halogens, alkoxide groups, amino groups and isocyanate groups, R_1 and R_2 are alkyl groups with carbon numbers of 1-21, R has a carbon number of 1-50, and denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6, wherein the material prevents copper diffusion.

3. (Previously Presented) The material for forming copper undercoat films according to claim 1, wherein $(R_1R_2)P\text{-}(R)n\text{-}Si$ groups are bonded to a substrate via Si-O bonding, by a solvent and by the compound represented by the general formula.

4. (Previously Presented) The material for forming copper undercoat films according to claim 1, characterized in that the compound represented by the general formula is selected from the group consisting of: 1-diethylphosphino-2-triethoxysilylethane, 1-diphenylphosphino-2-triethoxysilylethane, 1-dimethylphosphino-2-trimethoxysilylethane, 1-diethylphosphino-

2trimethoxysilylethane, 1-diphenylphosphino-2-trimethoxysilylethane, 1-dimethylphosphino-3triethoxysilylpropane, 1-diethylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-2-trichlorosilylethane, 1-diphenylphosphino-2trisdimethylaminosilylethane, 1-diphenylphosphino-2-triisocyanatosilylethane and 1-diphenylphosphino-4-triethoxysilylethylbenzene.

5. (Withdrawn) A method for forming copper undercoat films comprising, contacting the material for forming copper undercoat films of claim 1 with a substrate surface, thus forming a copper undercoat film.

6. (Withdrawn) The method for forming copper undercoat films according to claim 5, wherein the undercoat film is produced by the bonding of $(R_1R_2)P\text{-}(R)_n\text{-}Si$ groups to the substrate via Si-O bonding, and wherein the reaction between $-Si(X_1X_2X_3)$ groups and -OH groups at the substrate surface occurs in liquid phase.

7. (Withdrawn) The method for forming copper undercoat films according to claim 5, wherein the undercoat film is produced by the bonding of $(R_1R_2)P\text{-}(R)_n\text{-}Si$ groups to the substrate via Si- O bonding, and wherein the reaction between–Si $(X_1X_2X_3)$ groups and -OH groups at the substrate surface occurs in gas phase.

8. (Withdrawn) The method for forming copper undercoat films according to claim 5, wherein the undercoat film is produced by the bonding of $(R_1R_2)\text{-}(R)_n\text{-}Si$ groups to the substrate via Si-O bonding, and wherein the reaction between $-Si(X_1X_2X_3)$ groups and -OH groups at the substrate surface occurs in a supercritical liquid.

9. (Withdrawn) The method for forming copper undercoat films according to claim 5, characterized in that the reaction between $-Si(X_1X_2X_3)$ groups and -OH groups at the substrate surface is carried out under the condition of room temperature to 450 °C.

10. (Previously Presented) The material for forming copper undercoat films according to claim 2, wherein (R_1R_2)P-(R)n-Si groups are bonded to a substrate via Si-O bonding, by a solvent and by the compound represented by the general formula.

11. (Previously Presented) The material for forming copper undercoat films according to claim 2, characterized in that the compound represented by the general formula is selected from the group consisting of: 1-diethylphosphino-2-triethoxysilylethane, 1-diphenylphosphino-2-triethoxysilylethane, 1-dimethylphosphino-2-trimethoxysilylethane, 1-diethylphosphino-2trimethoxysilylethane, 1-diphenylphosphino-2-trimethoxysilylethane, 1-dimethylphosphino-3triethoxysilylpropane, 1-diethylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-2-trichlorosilylethane, 1-diphenylphosphino-2trisdimethylaminosilylethane, 1-diphenylphosphino-2-triisocyanatosilylethane and 1-diphenylphosphino-4-triethoxysilylethylbenzene.

12. (Withdrawn) A method for forming copper undercoat films comprising, contacting the material for forming copper undercoat films of claim 2 with a substrate surface, thus forming a copper undercoat film.

13. (Withdrawn) The method for forming copper undercoat films according to claim 12, wherein the undercoat film is produced by the bonding of $(R_1R_2)P-(R)_n-Si$ groups to the substrate via Si-O bonding, and wherein the reaction between $-Si(X_1X_2X_3)$ groups and -OH groups at the substrate surface occurs in liquid phase.

14. (Withdrawn) The method for forming copper undercoat films according to claim 12, wherein the undercoat film is produced by the bonding of $(R_1R_2)P-(R)_n-Si$ groups to the substrate via Si-0 bonding, and wherein the reaction between–Si $(X_1X_2X_3)$ groups and -OH groups at the substrate surface occurs in gas phase.

15. (Withdrawn) The method for forming copper undercoat films according to claim 12, wherein the undercoat film is produced by the bonding of (R_1R_2)-$(R)_n$-Si groups to the substrate via Si-O bonding, and wherein the reaction between -Si($X_1X_2X_3$) groups and -OH groups at the substrate surface occurs in a supercritical liquid.

16. (Withdrawn) The method for forming copper undercoat films according to claim 12, characterized in that the reaction between -Si($X_1X_2X_3$) groups and -OH groups at the substrate surface is carried out under the condition of room temperature to 450 °C.